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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/809,492	03/26/2004	Ted Guidotti	1018798-000222	7892
21839 7590 01/22/2009 BUCHANAN, INGERSOLL & ROONEY PC POST OFFICE BOX 1404 ALEXANDRIA, VA 22313-1404				
EXAMINER				
HAND, MELANIE JO				
ART UNIT		PAPER NUMBER		
3761				
NOTIFICATION DATE		DELIVERY MODE		
01/22/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ADIPFDD@bipc.com

### Office Action Summary

**Application No.**

10/809,492

**Applicant(s)**

GUIDOTTI ET AL.

**Examiner**

MELANIE J. HAND

**Art Unit**

3761

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 October 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3, 5, 6, 9-18, 22, 23 and 26-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 6, 9-18, 22, 23, 26-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Response to Arguments***

1. Applicant's arguments filed October 8, 2008 with respect to amended independent claims 1 and 16 have been fully considered but they are moot in view of the new ground of rejection prompted by applicant's amendment to the claims. However examiner will briefly address the essence of applicant's arguments herein. Applicant argues that Lindsay does not disclose or suggest longitudinally extending apertures extending through an entire thickness of the first storage layer. It is examiner's position that Lindsay fairly suggests such apertures because Lindsay discloses crease lines 52 which are recesses to promote downward folding, i.e. impart additional flexibility, and Lindsay also discloses aperturing either absorbent member (central or outside) wherein upper absorbent layer 36 is part of the central member, for improved flexibility and body conformability. (Col. 23, lines 58-60) Therefore, since crease lines 52 and aperturing of layer 36 are disclosed by Lindsay as being utilized to accomplish the identical goal of improved flexibility, Lindsay fairly suggests replacing the crease lines 52 with apertures, meeting the limitation of longitudinally extending apertures that extend through an entire thickness of a first storage layer, as the crease lines 52 do to provide the improved flexibility. As to the argument that Lindsay's intent with aperturing is to increase flexibility and not increase flow through the first storage layer 36, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985). Lindsay fairly suggests apertures as recited in claims 1 and 16 which would necessarily also provide improved flow, as is the nature of apertures, in addition to improved flexibility.
2. As to arguments regarding claims 22 and 23, Lindsay discloses an alternate embodiment in Fig. 6 in which the second storage layer has a central portion extending between

the liquid impermeable surface defined by the outer surface of backsheet 14 and the acquisition layer 38, providing an identical function to the second storage layer 20 disclosed in the embodiment of Fig. 1B. As can be seen in Fig. 1B, the second storage layer having a central portion as disclosed in Fig. 6 can easily replace the second storage layer in Fig. 1B without destruction of the article for its intended purpose. Lindsay discloses that this second storage layer provides a void for receiving absorbent member 18 (Col. 17, lines 32-36), which will in turn provide additional leakage protection under absorbent member 18, which provides motivation to one of ordinary skill in the art to modify an article according to the embodiment of Fig. 1B disclosed by Lindsay so as to instead have a second storage layer according to the embodiment of Fig. 6.

3. Applicant's arguments with regard to dependent claims 2, 3, 5, 6, 9, 10-15, 17, 18 and 26-29 have been fully considered but are not persuasive, as applicant's arguments depend entirely on arguments regarding the rejection of claim 16, which have been addressed *supra*.

#### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-3, 5, 6, 11, 14, 15-18, 22, 23 and 26-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay et al ('955).

With respect to **claim 1**: Lindsay discloses an absorbent article 10 comprising a liquid permeable upper surface defined by topsheet 12 a liquid-impermeable lower surface defined by liquid impermeable backsheet 14, and an absorbent structure arranged between said upper surface and said lower surface in the collective form of central absorbent member 18 and outer absorbent member 20. The article 10 in the longitudinal direction has a crotch portion, defined by the thinner portion of the article, and two end portions. (Fig. 1A) The absorbent structure 18 comprises an acquisition layer in the form of lower absorbent layer 38 and at least one first storage layer in the form of upper absorbent layer 36. The absorbent core (including first storage layer 36) comprises between 5-90% by weight based upon the combined weight of central absorbent member 18 and outer absorbent member 20 combined. Therefore the weight percentage based upon the first storage layer 36 alone will be greater than 5-90%, which overlaps the claimed range of at least 50 percent by weight of a super absorbent material calculated on the total weight of the first storage layer. Examiner is basing this range upon an assumption of equal distribution throughout the entire core based upon Lindsay's teachings regarding how the superabsorbent is incorporated in Col. 28, lines 49-61. Thus each component will have a superabsorbent weight percentage between 5-90% by weight based upon core weight, or greater than 5-90% based upon total weight of the first storage layer. The first storage layer has apertures (e.g. slits) or recesses (e.g. pleats) throughout the length of the layer (Col.

23, lines 58-60), and thus necessarily has apertures or recesses in the crotch portion of the absorbent structure. As can be seen in Fig. 1B, the first storage layer 36 has a first surface facing the liquid permeable upper surface of the article defined by topsheet 12, and a second surface facing away from the liquid permeable surface of the article, wherein the first storage layer lies between the acquisition layer 38 and the liquid permeable upper surface.

Lindsay discloses that the first storage layer 36 in a dry condition has a density of less than 0.15 g/cc. (Col. 24, lines 50-52) which does not fall within the claimed range of a density exceeding 0.4 g/cm<sup>3</sup>. However Lindsay fairly suggests a first storage layer having a density exceeding 0.4 g/cc by disclosing that the central absorbent member (layers 36 and 38 together) have a combined basis weight of 10-2500 grams per square meter (gsm) (Col. 24, lines 52-58) and a thickness of no more than 2-15 mm (Col. 23, lines 37-39), wherein the central absorbent member 18 occupies substantially all of the thickness of the article as can be seen in at least Fig. 1B. This basis weight range and thickness range yields a range for density of the central absorbent member 18 of 0.007 g/cc – 12.5 g/cc. Further, Lindsay discloses that the basis weight, which is altered by superabsorbent content, can be adjusted and optimized for particular purposes over a wide range. Thus, it would be obvious to one of ordinary skill in the art to modify the central absorbent member such that the first storage layer alone has a density within the range implied by Lindsay to provide a core with a uniform predictable composition throughout to ensure proper performance of the absorbent structure.

Lindsay discloses crease lines 52 which are recesses to promote downward folding, i.e. impart additional flexibility. However Lindsay does not explicitly disclose longitudinally extending apertures extending through an entire thickness of the first storage layer. It is examiner's position that Lindsay fairly suggests such apertures because Lindsay also discloses aperturing either absorbent member (central or outside) wherein upper absorbent layer 36 is part of the

central member, for improved flexibility and body conformability. (Col. 23, lines 58-60)

Therefore, since crease lines 52 and aperturing of layer 36 are disclosed by Lindsay as being utilized to accomplish the identical goal of improved flexibility, it would be obvious to one of ordinary skill in the art to modify the article of Lindsay by replacing said crease lines with apertures with a reasonable expectation of success to e, meeting the limitation of longitudinally extending apertures that extend through an entire thickness of a first storage layer, as the crease lines 52 do to provide the improved flexibility.

With respect to **claim 2**: The first storage layer fairly suggested by Lindsay has a density of 0.007 – 12.5 g/cc which overlaps and renders obvious the claimed range of a density exceeding 0.5 g/cm<sup>3</sup>. The motivation to modify the article of Lindsay such that the density is uniform throughout to yield a first storage layer with a density within the claimed range is stated *supra* with respect to claim 1.

With respect to **claim 3**: The first storage layer comprises a greater percentage by weight of superabsorbent than that disclosed for the whole of the central absorbent member, i.e. greater than between 5-90%, which overlaps and renders obvious the claimed range of at least 70 percent by weight of a super absorbent material calculated on the total weight of the first storage layer. As stated with respect to claim 1, examiner is assuming a uniform distribution of superabsorbent material throughout the two layers 36 and 38 of the central absorbent member 18 based upon Lindsay's teachings as to how the superabsorbent is incorporated.

With respect to **claim 5**: The apertures fairly suggested by Lindsay, in an identical manner to the crease lines, extend along the longitudinal direction of the absorbent structure, wherein the

apertures comprise longitudinal channels, i.e. creases with an open bottom end instead of a valley. The motivation to modify the article of Lindsay by replacing the crease lines with apertures is stated *supra* with respect to claim 1.

With respect to **claim 6**: The central absorbent member disclosed by Lindsay, and thus also the first storage layer 36, has a width maximum of 100% of the width of the article. In the crotch region the width of the article is about 20 mm or greater. Since the first storage layer is not continuous, there is no one piece of material between the apertures or recesses that is equal to the maximum width of the first storage layer or central absorbent member. Thus, the material between the apertures suggested by Lindsay in the crotch portion of the first storage layer necessarily exhibit a width that is maximally 20 mm. (Fig. 1B, Col. 24, lines 19-26) The motivation to modify the article of Lindsay by replacing the crease lines with apertures is stated *supra* with respect to claim 1.

With respect to **claim 11**: Lindsay teaches that the article exhibits a bend stiffness of less than 1,500 grams. Since the article is limited in its bend stiffness by the stiffest element of the article and the stiffest element is not the foam, the foam material necessarily exhibits a bend stiffness equal to or less than Gurley stiffness value lower than 1000 mg. As to the limitation "a Gurley stiffness value", The test method recited in the claim *per se* does not substantially affect the value of a specific parameter, which is a characteristic of the material and depends on the structure and make up of a material, but not on the method of its determination. Since the test method does not essentially affect the weakening element structure or the absorbent structure during testing, the test method bears little patentable weight because any test method will yield substantially identical results, and thus the test method used cannot be the basis for



patentability over the prior art. The first storage layer fairly suggested by Lindsay has a density in a dry condition of 0.007 – 12.5 g/cc which overlaps and renders obvious the claimed range of a density exceeding 0.5 g/cm<sup>3</sup>. The motivation to modify the article of Lindsay such that the density is uniform throughout to yield a first storage layer with a density within the claimed range is stated *supra* with respect to claim 1.

With respect to **claim 14**: The absorbent structure 10 disclosed by Lindsay further comprises a second storage layer in the form of outer absorbent member 20 containing a lower amount of super absorbent material calculated on the total weight of the storage layer than the first storage layer 36 inasmuch as the overall basis weight of the outer absorbent member 20 is less than that of the central member, assuming herein that the superabsorbent material is distributed uniformly. (Col. 22, lines 49-51) Lindsay discloses an alternate embodiment in Fig. 6 in which the second storage layer has a central portion extending between the liquid impermeable surface defined by the outer surface of backsheet 14 and the acquisition layer 38, providing an identical function to the second storage layer 20 disclosed in the embodiment of Fig. 1B. As can be seen in Fig. 1B, the second storage layer having a central portion as disclosed in Fig. 6 can easily replace the second storage layer in Fig. 1B without destruction of the article for its intended purpose. Lindsay discloses that this second storage layer provides a void for receiving absorbent member 18 (Col. 17, lines 32-36), which will in turn provide additional leakage protection under absorbent member 18. Therefore, while Lindsay does not disclose a single embodiment that meets all of the limitations of claim 14, it would be obvious to one of ordinary skill in the art to modify the article of Lindsay according to the embodiment of Fig. 1B so as to also have a second storage layer arranged between the acquisition layer and liquid

impermeable lower surface with a reasonable expectation of success to provide additional leakage protection.

With respect to **claim 15**: The absorbent structure further comprises a second storage layer 20 and wherein the second storage layer 20 partly encloses the first storage layer 36 as can be seen in Fig. 1B. (Col. 12, lines 54-58) Lindsay discloses an alternate embodiment in Fig. 6 in which the second storage layer has a central portion extending between the liquid impermeable surface defined by the outer surface of backsheet 14 and the acquisition layer 38, providing an identical function to the second storage layer 20 disclosed in the embodiment of Fig. 1B. As can be seen in Fig. 1B, the second storage layer having a central portion as disclosed in Fig. 6 can easily replace the second storage layer in Fig. 1B without destruction of the article for its intended purpose. Lindsay discloses that this second storage layer provides a void for receiving absorbent member 18 (Col. 17, lines 32-36), which will in turn provide additional leakage protection under absorbent member 18. Therefore, while Lindsay does not disclose a single embodiment that meets all of the limitations of claim 15, it would be obvious to one of ordinary skill in the art to modify the article of Lindsay according to the embodiment of Fig. 1B so as to also have a second storage layer arranged between the acquisition layer and liquid impermeable lower surface with a reasonable expectation of success to provide additional leakage protection.

With respect to **claim 16**: Lindsay discloses an absorbent article 10 comprising a liquid permeable upper surface defined by topsheet 12, a liquid-impermeable lower surface defined by liquid impermeable backsheet 14, and an absorbent structure arranged between said upper surface and said lower surface in the collective form of central absorbent member 18 and outer

absorbent member 20. The article 10, in the longitudinal direction, has a crotch portion defined by the portion of the article where the width is less relative to the ends, and two end portions. The absorbent structure comprises an acquisition layer as part of central absorbent member 18 in the form of lower absorbent layer 38 and at least one first storage layer in the form of upper absorbent layer 36 comprising a superabsorbent material. The first storage layer 36 is located between the acquisition layer 38 and said liquid permeable upper surface and said first storage layer has apertures or recesses throughout the layer and thus necessarily has apertures or recesses in the crotch portion of the absorbent structure. The first storage layer 36 has a first surface facing the liquid permeable upper surface of the article, and a second surface facing away from the liquid permeable surface of the article.

Lindsay discloses crease lines 52 which are recesses to promote downward folding, i.e. impart additional flexibility. However Lindsay does not explicitly disclose longitudinally extending apertures extending through an entire thickness of the first storage layer. It is examiner's position that Lindsay fairly suggests such apertures because Lindsay also discloses aperturing either absorbent member (central or outside) wherein upper absorbent layer 36 is part of the central member, for improved flexibility and body conformability. (Col. 23, lines 58-60) Therefore, since crease lines 52 and aperturing of layer 36 are disclosed by Lindsay as being utilized to accomplish the identical goal of improved flexibility, it would be obvious to one of ordinary skill in the art to modify the article of Lindsay by replacing said crease lines with apertures with a reasonable expectation of success to e, meeting the limitation of longitudinally extending apertures that extend through an entire thickness of a first storage layer, as the crease lines 52 do to provide the improved flexibility.

With respect to **claim 17**: The absorbent core (including first storage layer 36) comprises between 5-90% by weight based upon the combined weight of central absorbent member 18 and outer absorbent member 20 combined. Therefore the weight percentage based upon the first storage layer 36 alone will be greater than 5-90%, which overlaps the claimed range of at least 50 percent by weight of a super absorbent material calculated on the total weight of the first storage layer. Examiner is basing this range upon an assumption of equal distribution throughout the entire core based upon Lindsay's teachings regarding how the superabsorbent is incorporated in Col. 28, lines 49-61. Thus each component will have a superabsorbent weight percentage between 5-90% by weight based upon core weight, or greater than 5-90% based upon total weight of the first storage layer.

With respect to **claim 18**: Lindsay discloses that the first storage layer 36 in a dry condition has a density of less than 0.15 g/cc. (Col. 24, lines 50-52) which does not fall within the claimed range of a density exceeding 0.4 g/cm<sup>3</sup>. However Lindsay fairly suggests a first storage layer having a density exceeding 0.4 g/cc by disclosing that the central absorbent member (layers 36 and 38 together) have a combined basis weight of 10-2500 grams per square meter (gsm) ((Col. 24, lines 52-58) and a thickness of no more than 2-15 mm (Col. 23, lines 37-39), wherein the central absorbent member 18 occupies substantially all of the thickness of the article as can be seen in at least Fig. 1B. This basis weight range and thickness range yields a range for density of the central absorbent member 18 of 0.007 g/cc – 12.5 g/cc. Further, Lindsay discloses that the basis weight, which is altered by superabsorbent content, can be adjusted and optimized for particular purposes over a wide range. Thus it would be obvious to one of ordinary skill in the art to modify the central absorbent member such that the first storage layer

alone has a density within the range implied by Lindsay to provide a core with a uniform predictable composition throughout to ensure proper performance of the absorbent structure.

With respect to **claim 19**: As can be seen in Fig. 1B, at least one aperture or recess is formed by crease lines 52 extend through an entire thickness of the first storage layer. (Col. 12, lines 48-54)

With respect to **claim 22**: The absorbent structure 10 disclosed by Lindsay further comprises a second storage layer in the form of outer absorbent member 20 containing a lower amount of super absorbent material calculated on the total weight of the storage layer than the first storage layer 36 inasmuch as the overall basis weight of the outer absorbent member 20 is less than that of the central member, assuming herein that the superabsorbent material is distributed uniformly. (Col. 22, lines 49-51) Lindsay discloses an alternate embodiment in Fig. 6 in which the second storage layer has a central portion extending between the liquid impermeable surface defined by the outer surface of backsheet 14 and the acquisition layer 38, providing an identical function to the second storage layer 20 disclosed in the embodiment of Fig. 1B. As can be seen in Fig. 1B, the second storage layer having a central portion as disclosed in Fig. 6 can easily replace the second storage layer in Fig. 1B without destruction of the article for its intended purpose. Lindsay discloses that this second storage layer provides a void for receiving absorbent member 18 (Col. 17, lines 32-36), which will in turn provide additional leakage protection under absorbent member 18. Therefore, while Lindsay does not disclose a single embodiment that meets all of the limitations of claim 22, it would be obvious to one of ordinary skill in the art to modify the article of Lindsay according to the embodiment of Fig. 1B so as to also have a second storage layer arranged between the acquisition layer and liquid

impermeable lower surface with a reasonable expectation of success to provide additional leakage protection.

With respect to **claim 23**: The absorbent structure further comprises a second storage layer in the form of outer absorbent member 20 wherein the second storage layer 20 partly encloses the first storage layer 36 as can be seen in Fig. 1B. (Col. 12, lines 54-58) Lindsay discloses an alternate embodiment in Fig. 6 in which the second storage layer has a central portion extending between the liquid impermeable surface defined by the outer surface of backsheet 14 and the acquisition layer 38, providing an identical function to the second storage layer 20 disclosed in the embodiment of Fig. 1B. As can be seen in Fig. 1B, the second storage layer having a central portion as disclosed in Fig. 6 can easily replace the second storage layer in Fig. 1B without destruction of the article for its intended purpose. Lindsay discloses that this second storage layer provides a void for receiving absorbent member 18 (Col. 17, lines 32-36), which will in turn provide additional leakage protection under absorbent member 18. Therefore, while Lindsay does not disclose a single embodiment that meets all of the limitations of claim 23, it would be obvious to one of ordinary skill in the art to modify the article of Lindsay according to the embodiment of Fig. 1B so as to also have a second storage layer arranged between the acquisition layer and liquid impermeable lower surface with a reasonable expectation of success to provide additional leakage protection.

With respect to **claim 24**: The first storage layer 36 is located between the acquisition layer 38 and said liquid permeable upper surface defined by a liquid permeable upper layer 12. (Fig. 1B)

With respect to **claim 26**: The apertures or recesses are formed by crease lines 52 and are in the form of longitudinal channels considered herein to be adapted to direct liquid in a direction towards the end portions of the absorbent structure. (Col. 12, lines 48-54)

With respect to **claim 27**: The apertures or recesses are creases that form channels, i.e. they are spaces capable of holding liquid before the liquid is absorbed by the first storage layer 36. (Col. 12, lines 48-54)

With respect to **claim 28**: The apertures suggested by Lindsay are in the form of longitudinal channels, i.e. the disclosed creases having an open bottom end instead of a valley, considered herein to be adapted to direct liquid in a direction towards the end portions of the absorbent structure. (Col. 12, lines 48-54) The motivation to modify the article of Lindsay by replacing the crease lines with apertures is stated *supra* with respect to claim 16.

With respect to **claim 29**: The apertures suggested by Lindsay are, e.g. the disclosed creases with open bottom ends that form channels. That is, they are spaces capable of holding liquid before the liquid is absorbed by the first storage layer 36. (Col. 12, lines 48-54) The motivation to modify the article of Lindsay by replacing the crease lines with apertures is stated *supra* with respect to claim 16.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay et al ('955) in view of Olsen et al (U.S. Patent No. 5,849,003).

With respect to **claim 9**: The absorbent article 10 comprises a liquid permeable top sheet 12 and discloses that the storage layer has crease lines 52. Lindsay fairly suggests replacing said creases with apertures as stated *supra* with respect to claim 1. Lindsay does not teach that the liquid permeable top sheet and the acquisition layer are thermally joined in a hollow space in the first storage layer created by said apertures. Olsen teaches an absorbent article in which a topsheet is bonded to an underlying acquisition layer (capillary channel bun 44) that functions as a storage layer as in upper absorbent layer 36 of Lindsay, which is in turn bonded to an absorbent core that functions as an acquisition layer as in the lower absorbent 38 of Lindsay. Olsen teaches that the topsheet is bonded at the point of apertures to the capillary fibers of the capillary bun 44. This bonding occurs via hot melt adhesives, thus the topsheet and first storage layer 44 of Olsen are thermally joined to activate the hot melt adhesives in a hollow space in the first storage layer 44 created by said capillaries. ('003, Col. 23, lines 3-33) Olsen teaches that this allows fluid to flow more efficiently through the topsheet and first storage layer 44 to the core. Thus it would be obvious to one of ordinary skill in the art to modify the article of Lindsay by thermally joining the topsheet and acquisition layer in a hollow space in the first storage layer 36 created by apertures as taught by Olsen to more efficiently guide fluid into the channels defined by said apertures to the absorbent core.

8. Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay et al ('955) in view of Berg et al (U.S. Patent No. 5,180,622).

With respect to **claim 10**: Lindsay discloses that the acquisition layer 38 is an absorbent foam material and discloses superabsorbent as a suitable absorbent material but does not disclose a polyacrylate based super absorbent foam material. Berg teaches a polyacrylate foam material



used in an absorbent core 41 of a diaper 20. (Fig. 1) (Col. 22, lines 61-65). The absorbent core is comprised of an acquisition zone 56 (Col. 32, lines 35-44) and since the core material is uniform throughout, said acquisition zone 56 is also comprised of polyacrylate foam material. Berg teaches that said foam material is formed by an acrylic acid monomer allowed to polymerize with the aid of an interparticle crosslinking agent sprayed on the acrylic acid monomers. (Col. 7, lines 40-46, Co. 14, lines 28-39) Berg teaches that such a material especially in film form integrated in an absorbent article enhances fluid uptake rate and minimizes gel blocking (Abstract). Therefore, it would obvious to one of ordinary skill in the art to modify the acquisition layer taught by Lindsay so as to be comprised of a polyacrylate foam sheet material as taught by Berg.

With respect to **claim 12**: Lindsay discloses that the acquisition layer 38 is an absorbent foam material and discloses superabsorbent as a suitable absorbent material but does not disclose a polyacrylate based super absorbent foam material. Berg teaches a polyacrylate foam material used in an absorbent core 41 of a diaper 20. (Fig. 1) ('622, Col. 22, lines 61-65). The absorbent core is comprised of an acquisition zone 56 ('622, Col. 32, lines 35-44) and since the core material is uniform throughout, said acquisition zone 56 is also comprised of polyacrylate foam material. Berg teaches that said foam material is formed by an acrylic acid monomer allowed to polymerize with the aid of an interparticle crosslinking agent sprayed on the acrylic acid monomers. ('622, Col. 7, lines 40-46, Col. 14, lines 28-39) Berg teaches that such a material especially in film form integrated in an absorbent article enhances fluid uptake rate. ('622, Abstract) Therefore, it would obvious to one of ordinary skill in the art to modify the acquisition layer taught by Lindsay so as to be comprised of a polyacrylate foam sheet material as taught by Berg to enhance fluid uptake rate.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Lindsay in view of McBride (U.S. Patent Application Publication No. 2004/0019340).

With respect to **Claim 13**: Lindsay does not teach that the acquisition layer 38 is corona treated. McBride teaches an absorbent article having a topsheet and acquisition layer in which either or both are treated via corona treatment ('340, ¶0037) to improve affinity to water and water handling. Therefore, it would be obvious to one of ordinary skill in the art to corona treat the acquisition layer taught by the combined teaching of Lindsay to improve its affinity for water and fluid handling as taught by McBride.

### ***Conclusion***

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MELANIE J. HAND whose telephone number is (571)272-6464. The examiner can normally be reached on Mon-Thurs 8:00-5:30, alternate Fridays 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Examiner, Art Unit 3761

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